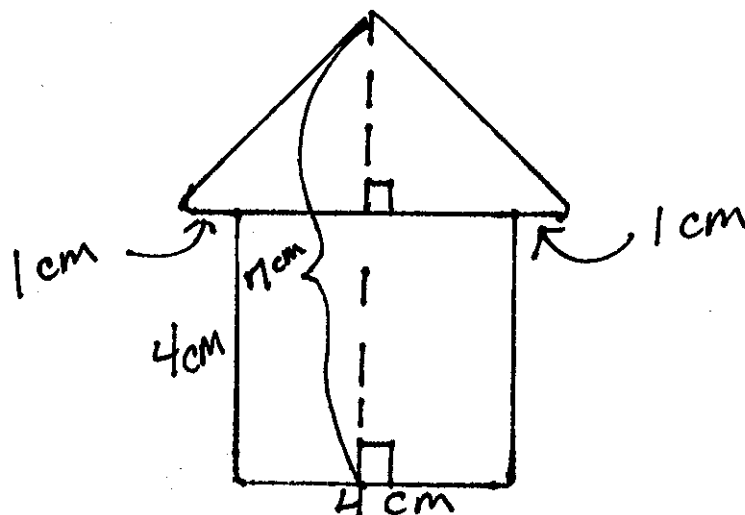


12-7-12

AREAS OF IRREGULAR SHAPES

* * To find areas of shapes that are combos. of parallelograms, trapezoids, triangles, and circles, add or subtract the individual areas.

Ex:



To find this area, break it up into a triangle & square. Find the area of each & add them.

A of Δ

$$A = \frac{bh}{2}$$

$$A = \frac{4 \times 3}{2}$$

$$A = \frac{12}{2} = 6 \text{ cm}^2$$

A of \square

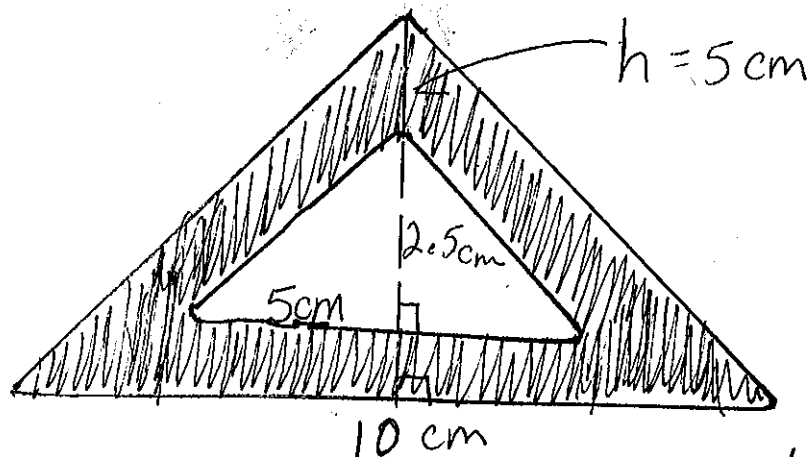
$$A = bh$$

$$A = 4 \times 4$$

$$A = 16 \text{ cm}^2$$

$$6 + 16 = 22 \text{ cm}^2$$

EX:



To find the area of the shaded part,
1st find the area of the large Δ
2nd find the area of the small Δ
3rd, subtract them

① A of Lg. Δ

$$A = \frac{bh}{2}$$

$$A = \frac{10 \times 5}{2}$$

$$A = \frac{50}{2} = 25 \text{ cm}^2$$

② A of Sm. Δ

$$A = \frac{bh}{2}$$

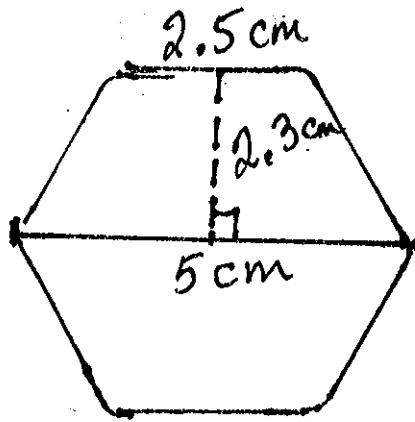
$$A = \frac{5 \times 2.5}{2}$$

$$A = \frac{12.5}{2} = 6.25 \text{ cm}^2$$

③ Subtract:

$$25 - 6.25 = 18.75 \text{ cm}^2$$

Ex:



To find this area, break it into 2 trapezoids

$$A = \frac{1}{2} h (b_1 + b_2)$$

$$A = \frac{1}{2} \times 2.3 (2.5 + 5)$$

$$A = 1.15 (7.5)$$

$$A = 8.625 \text{ cm}^2$$

Then double it :

$$8.625 \times 2 = 17.25 \text{ cm}^2$$